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COMMENTS ON ACTIVITIES OF THE WATER QUALITY TECHNICAL GROUP

On behalf of DowElanco, a manufacturer and registrant of the insecticide chlorpyrifos, I would like to comment on several important activities of the Water Quality Technical Group. These activities include: potential projects for CALFED early implementation, the process for compilation of the draft list of Parameters of Concern and Acceptable Ranges, and the specific value for chlorpyrifos listed under Acceptable Ranges.

DowElanco is encouraged by the identification of education, outreach and appropriate research support for pesticide surface water issues as a high priority project by both the agricultural and urban breakout groups. We are currently involved in extensive research involving the description of transport mechanisms of pesticides to surface water, new technologies to better understand and monitor potential exposure and availability to aquatic organisms, as well as the identification of use-practices for the reduction of pesticides in water.

While this research is being conducted, DowElanco has joined with other pesticide registrants, industry organizations and user-groups to identify and recommend Best Management Practices (BMPs)to minimize the off-site transport of pesticides resulting from certain agricultural use-patterns. It is expected that new information from current and future research will lead to more refined BMP recommendations.

There are several other BMP's programs currently being developed in California by groups including the Department of Pesticide Regulation, the State and Regional Water Boards, the West Stanislaus Resource Conservation District, and local interest groups. Lacking coordinated leadership, the individual effort of each of these groups will result in a fragmented approach to this problem, a duplication of effort and management direction. Unfortunately, an overall mechanism is not in place to facilitate the coordination of these programs in a way that expedites their impact. DowElanco has provided input to an industry-wide proposal from the Western Crop Protection Association to CALFED which proposes a University of California system-wide BMP program that employs the University's unique coordinating infrastructure to organize and fund research, education and outreach. This approach would establish a viable foundation for short term impact,

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and provide for long-term planning and implementation. DowElanco believes that this approach has significant value in both agricultural and urban settings.

In relation to this opportunity, I would like to point out two specific statements in your summary memo of December 18, and particularly in the Surface Drainage Source Control project number one in Agricultural Drainage. The introduction to this section suggests implementing Integrated Pest Management (IPM) "especially for parameters of concern." In fact, the three currently used pesticides listed as parameters of concern are often employed as IPM tools for pest control. A more accurate statement of the project objective would be to implement BMPs within an IPM strategy to mitigate concerns related to pesticide use, off-site transport and aquatic toxicity. These BMPs should not be focused on Parameters of Concern, rather they should target agronomic practices which lead to aquatic toxicity endpoint of concerns. Historically, a focus on active ingredients has resulted simply in a loss of crop protection tools and a shift in product preference toward pesticides with less data but comparable or greater impact on aquatic resources. This approach risks a false sense of security and suggests that affecting an individual Parameter would resolve or improve a situation. True progress can only occur through the refinement of agricultural practices which directly contribute to off-site pesticide transport. I do not believe that this view is necessarily inconsistent with the intent of the project summary, but the objective should be clarified.

A second statement in this section suggests that the project "should result in reduced pesticide loads applied to land." This would be true if implementation of an improved IPM approach eliminated unnecessary pesticide use (an outcome we would welcome). However, in some cases, the opposite may be true. In a highly targeted necessary application, a greater percentage of that application remains on the field rather than being lost by off-site transport into the aquatic environment. Loading the "land" or target, where crop protection products can be rapidly degraded, may actually be a key component of some Best Management Plans.

As a registrant, we have a vested interest in insuring that the highest standards of science and process are used in relation to our products. As stated in previous meetings and in correspondence, we do not agree with the approach used to identify the Parameters of Concern, or the search for Acceptable Ranges for different pesticides. The need for "targets" is understandable. To that end, the Regional Board Basin Plan expressly provides toxicity standards which eliminate some of the potential misinterpretations mentioned above. In addition, after extensive comment and deliberation between several State agencies, a comprehensive process is now in place to both identify currently used pesticides associated with surface water concerns and establish numeric targets, including

water quality objectives if appropriate. This is described in detail in the Management Agency Agreement between the Department of Pesticide Regulation and the State Water Resource Control Board. In our opinion, the draft listings of Parameters of Concern and Acceptable Ranges do not meet the standards of process or science that already exist for that purpose and are appropriate for these pesticides. While this concern may not be applicable for potential sources of toxicity that lack a specific science-based regulatory infrastructure or proprietary ownership by a registrant, it is an objection we feel compelled to reemphasize.

In relation to the specific Acceptable Range "target" value cited for chlorpyrifos (as opposed to a range), I have attached a memo from Dr. John Jachetta, State Regulatory Affairs Manager, summarizing the position of aquatic toxicologists at DowElanco. Should CALFED elect to pursue the Acceptable Ranges for currently used pesticides, I hope you will find this useful.

Notwithstanding the concerns mentioned in this memo, I want to restate our interest in advancing many of the important objectives of CALFED. We look forward to working with the CALFED process in the future.

Regards,

Bryan L. Stuart, Ph.D.
Government Relations Manager

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